### B.S. with Applied Physics Major in Astrophysics

#### Semester | Physics | Math | Lab Sci | Electives | Credits
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1 | Phys 172 (H) (4 cr.)  Mechanics  @Phys 217 (1 cr.) | Ma 165 (4 cr.)  Calculus I | Chm 115 (4 cr.) | Foreign Language (3 cr.) | 15-16<br>2 | Phys 272 (H) (4 cr.)  E&M | Ma 166 (4 cr.)  Calculus II | Chm 116 (4 cr.) | Foreign Language (3 cr.)  Engl 106 or 108 (3-4 cr.) | 18-19<br>3 | #Phys 290G (3 cr.)  (Gen.and Spl. Relativity)  #Phys 290F (3 cr.)  (Mathematical Physics) | Ma 261 (4 cr.)  Calculus III | ASTR 363 (3 cr.)  Intermediate Astronomy I | Adv. Engl Comp. (3 cr.) | 13-17<br>4 | Phys 342 (3 cr.)  (Modern Physics)  Phys 290A ©(1 cr.) | Ma 262/266/366  Differential Eqns.(3-4 cr) | ASTR 364 (3 cr.)  Intermediate Astronomy II  *Applied Elective (3-4 cr.) | General Ed. (3 cr.) | 15 -18<br>5 | Phys 310 (4 cr.)  Mechanics  Phys 322-450 (5 cr. total)  (Optics and Lab) | Math  Elective (3 cr.) | ASTR 370 (3 cr.)  Cosmology | | 15<br>6 | Phys 330 (3 cr.)  (Electromagnetism) | Math  Elective (3 cr.) | *Applied Elective (3-4 cr.)  ASTR 560 (3 cr.)  Stellar Evolution | General Ed. (3 cr.) | 15 - 16<br>7 | Phys 515 (3 cr.)  (Therm & Stat. Mech)  Phys 342L (1 cr.)  (Modern Lab) | *Applied Elective (3-4 cr.) | PHYS 570D (3 cr.)  Galactic And Extragalactic Astronomy | General Ed. (3 cr.)  General Ed. (3 cr.) | 16 - 17<br>8 | Phys 360 (3 cr.)  (Quantum) | *Applied Elective (3-4 cr.) | ASTR 500 (3 cr.)  Introduction To High Energy Astrophysics | General Ed. (3 cr.)  General Ed. (3 cr.) | 15 - 16

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1. The Applied Physics Program differs from the regular program in that only the second semester of a foreign language must be passed; slightly less physics credits are required; at least 30 hours of APPLIED electives are selected rather than free electives.
2. A grade point average of 2.0 in all physics and Applied Electives is required.
3. Residency Requirements: At least 32 hrs. of 300 level or above coursework required.
4. General Ed. To be chosen from five areas; 1) literature, philosophy, aesthetics; 2) history, political science; 3) anthropology, economics, psychology, sociology; 4) communications; 5) interdisciplinary studies.
5. *Applied Elective = 1 - 5 credit hours of a Science, Technology or Engineering Class, including upper level physics courses.

* Phys 290G or Phys 290F (3 cr.) (Introduction to Mathematical Methods in Physics) may be taken.